



Introduction to NCI's Center for Strategic Scientific Initiatives (CSSI) and Overview of the Provocative Questions Initiative

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Program Director

Center for Strategic Scientific Initiatives (CSSI)
Office of the Director, National Cancer Institute (NCI)
National Institutes of Health (NIH)

AACR 2013 Annual Meeting

April 8, 2013

National Cancer Institute Organization



Director
Harold Varmus, MD

**National Cancer
Institute**

\$5.07B
(FY12)



Deputy Director
Douglas Lowy, MD

**Office of the
Director**

CSSI

CCG*

~\$190 M (~4%)

*Center for Cancer Genomics (CCG) comprises the Office for Cancer Genomics (OCG) and The Cancer Genome Atlas (TCGA) Program

**Center for
Cancer
Research**

**Division of
Cancer
Epidemiology
and Genetics**

**Division of
Cancer
Treatment
and
Diagnosis**

**Division of
Cancer
Biology**

**Division of
Cancer
Control and
Population
Sciences**

**Division of
Cancer
Prevention**

**Division of
Extramural
Activities**

Conducting – Intramural

Funding – Extramural

CSSI Programs and Resources

Office of the Director



Director
Douglas R. Lowy, MD



Deputy Director
Jerry S.H. Lee, PhD







Office of Physical Sciences-Oncology

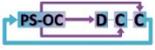
Director
Larry A. Nagahara, PhD










Office of Cancer Nanotechnology Research

Director
Piotr Grodzinski, PhD












Office of Cancer Clinical Proteomics Research

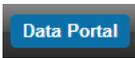
Director
Henry Rodriguez, PhD, MBA













NCI Center for Strategic Scientific Initiatives (CSSI): Concept Shop



Director
Douglas Lowy, MD



~\$190M (FY12)



Deputy Director
Jerry S.H. Lee, PhD

Mission

“...to create and uniquely implement exploratory programs focused on the development and integration of advanced technologies, trans-disciplinary approaches, infrastructures, and standards, to accelerate the creation and broad deployment of data, knowledge, and tools to empower the entire cancer research continuum in better understanding and leveraging knowledge of the cancer biology space for patient benefit...”

Distinct Programmatic Features of CSSI and CSSI Programs

- Support pilots concepts that ***sunset after 10 years***
- Type 1 grants/cooperative agreements apps only- ***no competitive renewal between phases***
- A balanced portfolio of contracts (in-house and FFRDC) and ***RFA-driven*** grants (no PA/PARs)
- Foundational programs that have potential to benefit ***all NCI DOCs supported science areas***

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2003, 2007, 2011



2005, 2010



2008



2011



2004, 2008



2005, 2008



2010

Provocative Questions Initiative

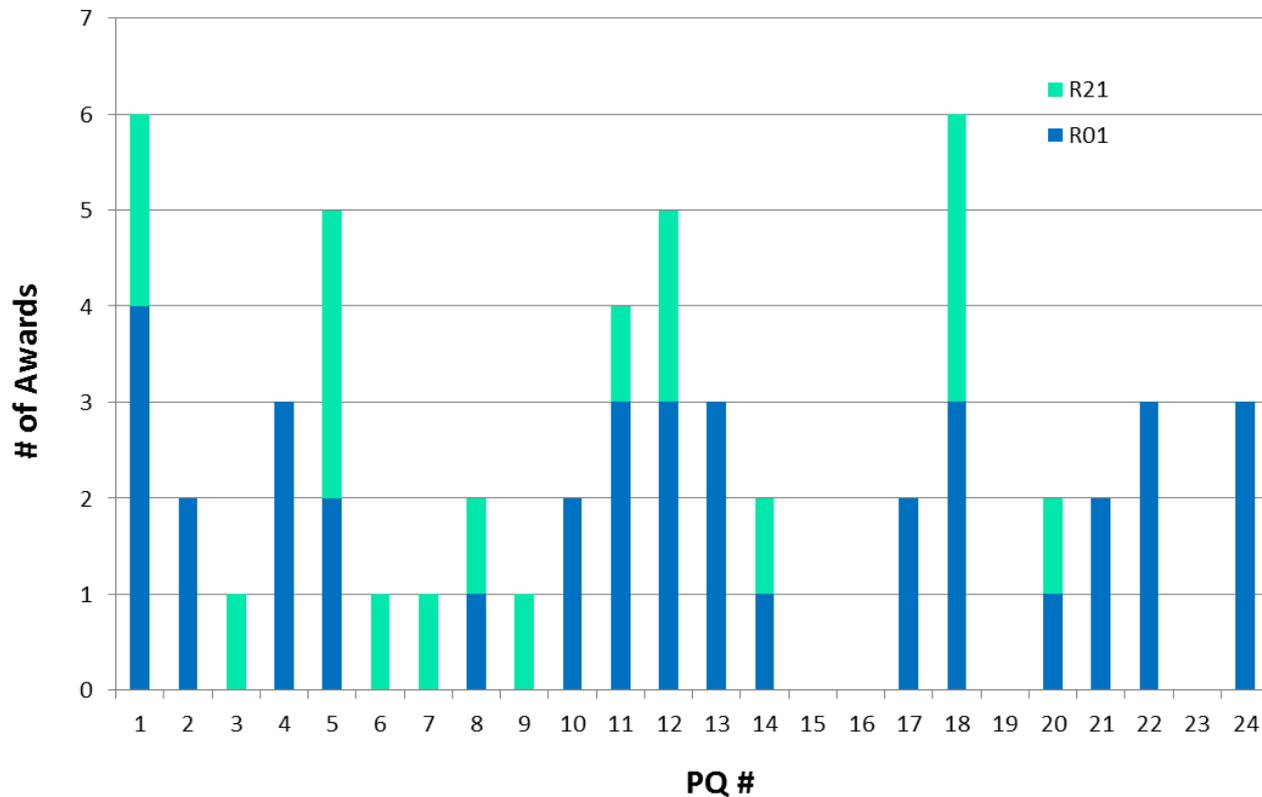


- **Program Objective:**
 - Stimulate specific areas of cancer research that are deemed understudied, neglected, paradoxical, or have been difficult to address in the past.
- **24 Provocative Questions (PQs)** were developed through a series of 16 workshops at the NIH and across the country
- **Proposals Should:**
 - Build on specific advances in our understanding of cancer and cancer control
 - Address broad issues in the biology of cancer that have been overlooked, unsolved or seemingly intractable
 - Take into consideration the likelihood of progress in the foreseeable future (e.g., 5 to 10 years)
 - Address ways to overcome obstacles to achieving long-term goals

PQ Round 1 Highlights

- 754 applications received and 56 grants awarded (38 R01s and 18 R21s)
- ~\$22M awarded (year 1, direct costs)
- 10 cited publications

Distribution of PQ Grants, CA-11-011 and CA-11-012



PQ15: second cancers

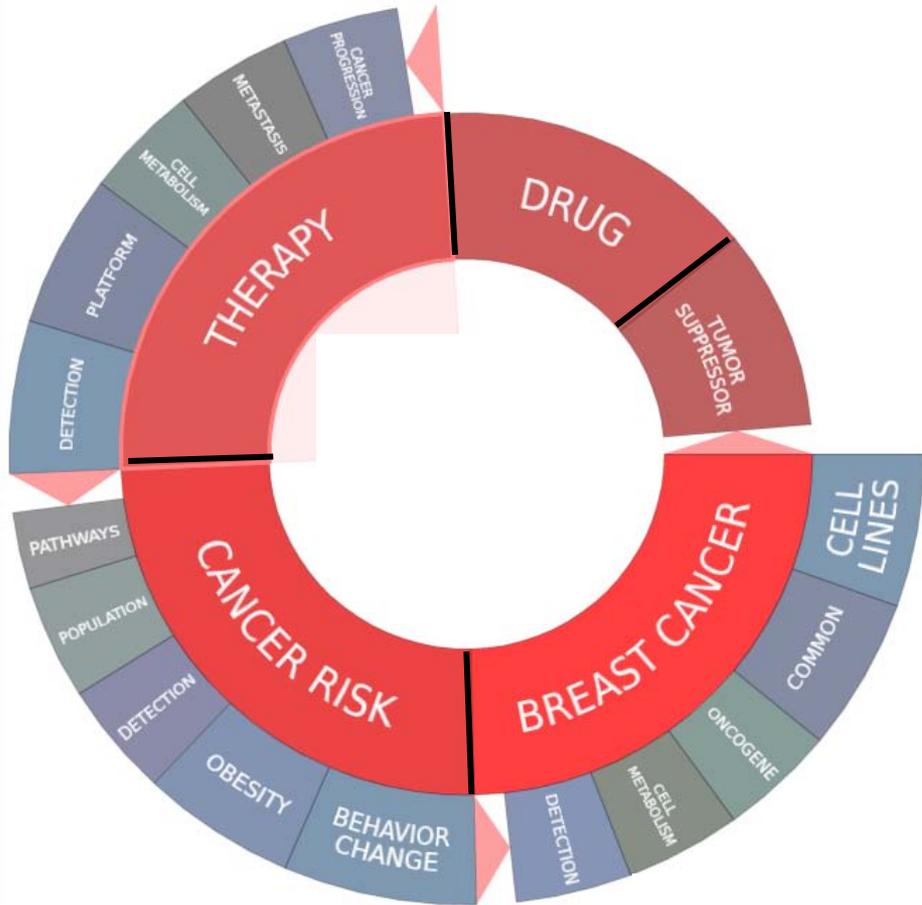
PQ16: cells from primary tumor at another site

PQ19: cure cancer with chemotherapy

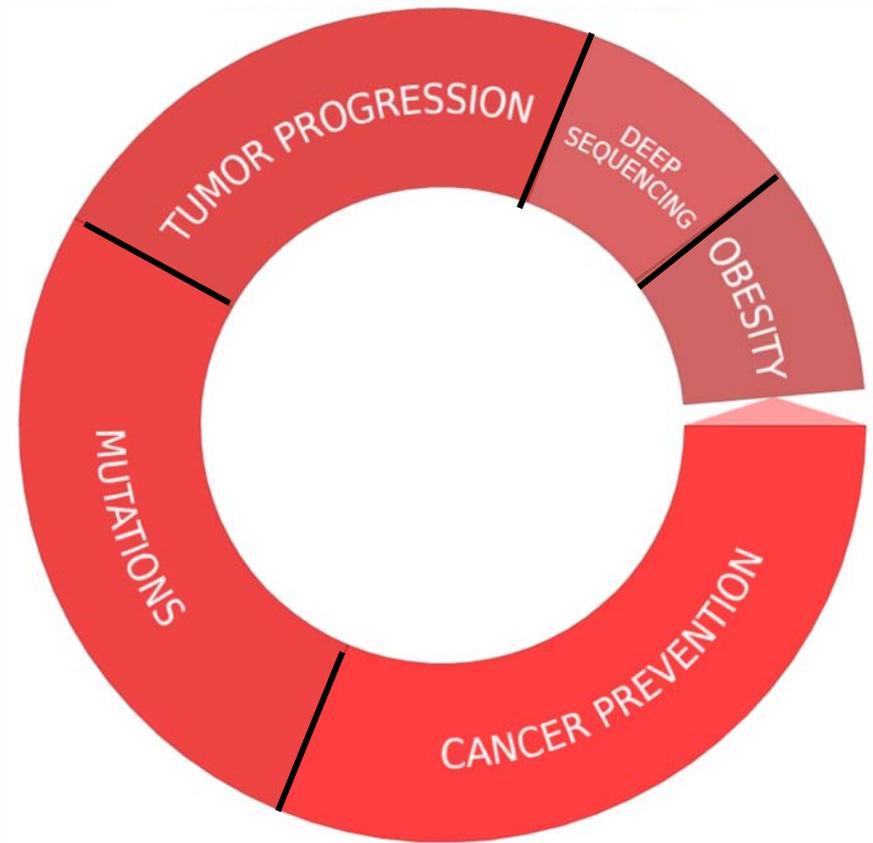
PQ23: tumor indolence

2012 PQ Awards: Project Topics

R01s

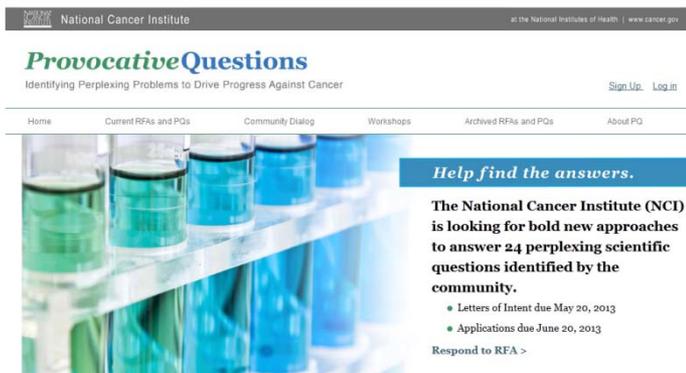


R21s



Current PQ Funding Opportunity Announcements

- 8 total RFAs (4 R01s and 4 R21s)
- 6 PQs in each thematic group
 - Group A: cancer prevention and risk
 - Group B: mechanisms of tumor development or recurrence
 - Group C: tumor detection, diagnosis, and prognosis
 - Group D: cancer therapy and outcomes
- R01s: 40-60 awards, up to \$20-28M
- R21s: ~ 24 awards, up to \$8-12M
- Letter of Intent submission deadline is **May 20th**
- Application submission deadline is **June 20th**



National Cancer Institute
at the National Institutes of Health | www.cancer.gov

Provocative Questions

Identifying Perplexing Problems to Drive Progress Against Cancer

Sign Up Log in

Home Current RFAs and PQs Community Dialog Workshops Archived RFAs and PQs About PQ

Help find the answers.

The National Cancer Institute (NCI) is looking for bold new approaches to answer 24 perplexing scientific questions identified by the community.

- Letters of Intent due May 20, 2013
- Applications due June 20, 2013

Respond to RFA >

Visit provocativequestions.nci.nih.gov
for current PQs and RFAs

Points to keep in mind...

- The PQs seek projects that truly go beyond widely accepted concepts, use novel approaches, and promise substantially more significant outcomes than incremental expansion of current knowledge
 - Research projects originally conceived as conventional investigator-initiated projects and applications for continuation of such projects are not appropriate
- There are not resubmissions (A1s) or renewals (Type 2s) accepted to the program
- If you wish to reply to more than one PQ you may do so in separate applications, but each application must only respond to one PQ
- Applications must include a “Challenge Statement” (see FOA documents for details) in order to be responsive to the RFA and be peer-reviewed
- **R01 applications:**
 - 4 year term of support
 - De-emphasis on the requirement for preliminary data
- **R21 applications:**
 - 2 year term of support
 - No preliminary data required, but will be evaluated if included

Learn More About Us...



<http://cssi.cancer.gov>

A screenshot of the CSSI website homepage. The top navigation bar includes "National Cancer Institute" and "U.S. National Institutes of Health | www.cancer.gov". The main header features the CSSI logo and navigation links: "HOME", "ABOUT CSSI", "CSSI OFFICES", and "CONTACT CSSI". The main content area has a dark background with a colorful DNA double helix on the right and the text: "ENABLING PROGRESS IN CANCER RESEARCH THROUGH ADVANCED TECHNOLOGIES, TRANS-DISCIPLINARY PROGRAMS AND RESOURCES". A "LEARN MORE" link is at the bottom of this section. The footer contains "NCI Home", "CSSI Home", "Contact Us", "Policies", "Access", and "A Service of the National Cancer Institute".

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A screenshot of the CSSI Timeline feature. It includes a "Timeline:" title, a "Select one or more offices to see events on timeline." section, and a "Zoom Level:" section. The "Offices:" section lists: "View All", "OD CSSI", "OHRK", "TCGA", "OCI", "OCCPE", "OCNR", and "OFSO". The "Zoom Level:" section lists: "1 Year", "3 Years", and "All Years". The main area shows a circular cluster of icons representing different offices and events, with a timeline axis at the bottom.